Abstract

Brazil is the eighth largest tomato producer, mostly for fresh market. In the past five years many growers started to sort and classify tomatoes using packing lines, it is still poor. The packing lines machines used on those, can be national or imported. Generally, it is formed of four steps(1) Receiving; (2) Sorting; (3) Cleaning; and (4) Classification. The cleaning step is composed by washing, drying and polishing. Cleaning efficiency in food industry is evaluated generally by microorganisms' presence, not by surface cleanness. The goal of this research was to evaluate the cleaning process in a tomato packing line located in Campinas, Sao paulo state using a methodology applied to this situation. Therefore, it was developed at FEAGRI/UNICAMP an equipment to measure the efficiency of the cleaning step. This feature was composed of the cleaning step. This feature was composed of a ring wrapped with white cloth. Fruits were submitted to this equipment and samples were taken before and after the cleaning step and evaluated using a colorimeter HUNTER Lab, scale CIELAB (L, a, b). Results showed that L values found in the analyzed fruits before the cleaning process were significantly different from the values found after that step. Darker L value represent more dirt on fruit surface, and poorer cleaning efficiency than lighter values. Cleaning efficiency was not correlated with an increase in number of brushes and their rotation. This methodology showed to be accurate to be used for measuring cleaning efficiency.